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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	· ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,971	09/22/2003	James C. Alexander	87353.2980	4960
7590 07/18/2005 BAKER & HOSTETLER LLP Washington Square, Suite 1100 1050 Connecticut Avenue, N.W.		EXAMINER		
		ADDIE, RAYMOND W		
			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			3671	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/664,971	ALEXANDER ET AL.	!			
Office Action Summary	Examiner	Art Unit	-			
	Raymond W. Addie	3671				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR RI THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days. If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some any reply received by the Office later than three months after the learned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a in not a reply within the statutory minimum of thire eriod will apply and will expire SIX (6) MON statute, cause the application to become Al	reply be timely filed by (30) days will be considered timely ITHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	13 April 2005.					
,-	This action is FINAL . 2b) This action is non-final.					
3) Since this application is in condition for all			.			
closed in accordance with the practice und	der <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.				
Disposition of Claims		·				
4)⊠ Claim(s) 1-23 is/are pending in the applica	ation.					
4a) Of the above claim(s) is/are with	ndrawn from consideration.		1			
5)⊠ Claim(s) <u>16-18</u> is/are allowed.						
6)⊠ Claim(s) <u>1-15 and 20-23</u> is/are rejected.						
• • • • • • • • • • • • • • • • • • • •						
8) Claim(s) are subject to restriction a	nd/or election requirement.					
Application Papers			İ			
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on 13 April 2005 is/are			İ			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the	ne Examiner. Note the attache	d Office Action or form P1O-152.				
Priority under 35 U.S.C. § 119			ļ			
12) Acknowledgment is made of a claim for for	reign priority under 35 U.S.C.	§ 119(a)-(d) or (f).	İ			
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	•					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-94	o, — —	s)/Mail Date Informal Patent Application (PTO-152)				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 04/13/05. 5) Notice of Informal Patent Application (PTO-152) 6) Other:						

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invention.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The specification shall contain a written description of the invention, and of the manner and process of

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-15, 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

Claim 1 recites the phrase "a first anchor point; a second anchor point; at least one effective anchor point...wherein said at least one effective anchor point has a location along the line of action and which location relative to the pivot point changes as said ramp assembly rotates".

It appears as though claim 1 requires 2 anchor points that are actual structural features, that permit a biasing member to be attached to a ramp assembly and either a base assembly or a loading dock. As well as multiple "effective anchor point(s)" which are not actual structural features, but rather imaginary points along a line of action, which itself is defined as being an imaginary line extending between the 1st and 2nd actual anchor points. Hence, the structural limitations implied by "at least one effective anchor point" is indefinite.

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Further, the scope of what would be considered equivalent to an "effective anchor point" is also indefinite, since even a detailed reading of the Applications' Specification would not enable one of ordinary skill in the art, to make or use the claimed invention.

Still further, it is unclear as to how the location of the "at least one effective anchor point"(s) is changed relative to the pivot point in response to the rotation of the ramp assembly. How exactly does the rotation of the ramp assembly cause a change in the location of an imaginary point?

Still further, do the other of the "at least one" effective anchor points stay stationary relative to the pivot point, as the ramp assembly rotates? Do the other of the "at least one" effective anchor points move relative to the pivot point, as the ramp assembly rotates? If so where to the other effective anchor points go to and what causes a change in their location along the line of action, relative to the pivot point, as the ramp assembly rotates?

Claim 21, Ins. 12-14, the phrase "the line of action is collinear to a line defined by a line between one of the first and 2nd anchor points and the effective anchor point and moves as said ramp assembly rotates to change counterbalance characteristics of the ramp assembly" is vague and confusing. Specifically, it is unclear as to what structural relationship exists between the "effective anchor point" and the "line of action"; that permits the changing of the counterbalance characteristics of the ramp assembly.

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Hence, for the reasons cited above, it is indefinite as to what is being claimed, what if any art recognized equivalents exist in the field of application and it is not believed that one of ordinary skill in the art, would be able to make or use the claimed invention.

For Examination purposes the Examiner puts forth the following prior art and a 1st

Grounds of Rejection, based on the disclosure of said prior art and how they anticipate or render obvious the claimed invention.

Claim Rejections - 35 USC § 102°

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Dieter # 3,636,578.

Dieter discloses a dock leveler capable of rotating from a vertical, upwardly extending storage/barrier position (see figs. 1, 4) to any of a plurality of lower, inclined, working positions (see figs. 5, 6), for connecting with and servicing cargo trucks.

Said dock leveler comprising:

A base assembly (80, 62).

A ramp assembly (34, 44) configured to rotate about a pivot pin (38).

A 1st anchor point disposed on the ramp assembly at (34).

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A 2nd anchor point (90) disposed on the base assembly at (80).

A biasing member, in the form of a spring (88) having a central

longitudinal axis defining a line of action.

Wherein the biasing member is coupled to the ramp assembly at (34) the 1st anchor point; and is coupled to the base assembly (80) at (90), the 2nd anchor point.

Further, wherein the center of the line of action, (anywhere on the spring (88)), changes in location and distance relative to the pivot point (38), when the ramp assembly is rotated. See Figs. 3, 4.

In regards to Claims 2-4 Dieter discloses the biasing member (88) is spring coupled to the second anchor point (90) via a flexible member (90), such that an attachment point between the flexible member (90) and the spring (88) defines an effective anchor point. See col. 4, Ins. 1-42.

In regards to claims 7, 8 Dieter discloses the base assembly (80, 62) comprises a cam plate (62) having at least one cam surface (72, 92) that are shaped to deflect the line of action of the spring (88) as the ramp assembly rotates, resulting from the at least one cam surface (72) selectively engaging the flexible member (80).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Beckwith et al. in view of Druzynski # 5,335,451.

Beckwith et al. discloses a dock leveler comprising:

A base assembly (34, 20, 18) mounted in a pit of a loading dock (12).

A ramp assembly (24, 28, 44), which is configured to rotate about a pivot point (26) from an upwardly, vertically stored position to any of multiple lower, operating positions, including above, below and at a level of the dock top surface (16).

A counter balance assembly (40, 36, 48) comprising:

A 1st and 2nd anchor points (44, 42) respectively.

A biasing member (36) mounted to the ramp assembly at a 1st anchor point on bar (44), and to the base assembly (34) at said 2nd anchor point (42), via fixed/non-flexible members. Said biasing member (36) defining a "direct line of action" between said anchor points.

What Beckwith et al. does not disclose is a counter balance assembly having selectively biased forces.

However, Druzynski teaches a spring-based, counter balance assembly capable of selectively biasing metal plate from a vertical and horizontal positions.

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Said counter balance system comprising:

At least one biasing member (18) fixedly attached to a 1st anchor point (22), which is disposed upon a metal plate (12) for rotation about a pivot point (20).

Said biasing member (18) being flexibly attached to a 2nd anchor point (26) via a flexible coupling device (24), such as chain.

Said biasing member defining a "direct line of action between said anchor points, when said metal plate is in either a vertical or horizontal position. See col. 2, ln. 34-col. 37. Wherein the biasing member is deflected away from the "direct line of action" as the metal plate (12) is rotated between the vertical and horizontal positions. Resulting in lower torque forces needed to bias the plate in a desired direction, as shown in Fig. 6. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dock leveler of Beckwith et al., with the counter balance assembly as taught by Druzynski, in order to minimize the spring forces required to rotate the ramp assembly to a vertical position. See Col. 3, ln. 1-col. 4, ln. 32.

In regards to claim 2-6 Beckwith et al. discloses the claimed dock leveler as put forth with respect to claim 1 above, but does not disclose an imaginary "effective anchor point". However, Druzynski teaches a counter balance system for moving a metal plate from a horizontal position to a vertical position, such that a biasing member, such as springs (18) can be attached to a flexible member, such as chain (24) such that a center

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of gravity (50) of the metal plate (12) moves from a point over the flexible member (24) as shown in Fig. 4, to a point, passing through the attachment of the spring (18) and the flexible member (24), and over the biasing member, spring (18), as shown in fig. 5.

The changing of the center of gravity of the metal plate (12) "effectively" changes/lowers the spring force needed to move plate (12) from a horizontal position to a vertical position. See cols. 3-4. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dock leveler of Beckwith et al., with the counter balance assembly as taught by Druzynski, in order to minimize the spring forces required to rotate the ramp assembly to a vertical position. See Col. 3, In. 1-col. 4, In. 32.

In regards to claims 7-9 Beckwith et al. discloses the claimed dock leveler as put forth with respect to claim 1 above, but does not disclose the use of a cam plate, as claimed. However, Druzynski teaches a counter-balance system for biasing a metal plate (12) between a horizontal and a vertical position. Said system comprising a cam plate (26) having at least one cam surface that selectively engages the flexible member (24), and is shaped to deflect the line of action of the spring force, as the plate (12) rotates. Wherein said biasing members (18) are coupled to a base assembly (28) at said 2nd anchor point. Said cam plate (26) having an anchor hole at which the spring is fixedly coupled to the base assembly (28) via said flexible member/chain (24). Further wherein said at least one cam surface comprises upper cam surface and a lower cam surface,

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such that said anchor hole, flexible member (24) and said cam surfaces "cooperate" to deflect the line of action of the biasing springs (18), when plate (12) rotates about the pivot point (20). See Figs. 4, 5. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dock leveler of Beckwith et al., with the counter balance assembly as taught by Druzynski, in order to minimize the spring forces required to rotate the ramp assembly to a vertical position. See Col. 3, In. 1-col. 4, In. 32.

In regards to Claim 10 Beckwith et al. discloses the claimed dock leveler as put forth with respect to claim 1 above, to include the use of a weight (48) that creates a variable moment force, when the dock leveler is moved between said vertical and multiple lower positions. Wherein a low moment force is provided by the weight (48) when the ramp assembly is in the vertical position; and a high moment force is provided by the weight (48) when in the lower operating positions; but does not disclose the use of a cam plate. However, Druzynski teaches a spring-based, counter-weighted (34), counter-balance system for biasing a metal plate toward a vertical position; wherein said counterbalance system further comprises:

A cam surface (on element 26) having a lower cam surface that is configured to provide a spring moment, in combination with said spring (18) that is less than the weight of the metal plate when the plate is a predetermined location.

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dock leveler of Beckwith et al., with a flexible coupling member as taught by

Druzynski, in order to reduce the speed at which the ramp assembly is raised to a vertical position. See col. 3, Ins. 12-22.

In regards to Claims 11-14 Beckwith et al. discloses a dock leveler as put forth with respect to claim 1 above, to include a counter balance weight (48) capable of creating a variable weight moment, and a spring moment that is greater than the weight moment of ramp assembly at least as the ramp assembly rotates above the horizontal operative position, the spring moment is approximately equal to the weight moment of the ramp assembly when the ramp assembly is in the stored position, and the dock leveler has a net moment which can vary as the ramp assembly rotates, as put forth above with respect to claim 10; and the net moment is in the downward direction when the ramp assembly is in the vertical, stored position; the net moment is in the upward direction when the ramp is moving between the horizontal and the vertical positions. What Beckwith et al. does not disclose is a net moment that is approximately zero at a position between the vertical stored position and the one or more operative positions. However, Druzynski teaches a counter-balance assembly for raising a metal plate (12) from a horizontal position to a vertical position, wherein the net moment of the plate is considered zero when the plate is in the vertical position and can be approximately zero

between the horizontal and vertical positions such that a preload can be provided to the spring force in order to offset the difference in the rate of change in force exerted by the plate (12) versus the force of the extension spring (18) as the plate (12) moves from the horizontal to the vertical position. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dock leveler of Beckwith et al., with a flexible coupling member as taught by Druzynski, in order to reduce the speed at which the ramp assembly is raised to a vertical position. See col. 3, Ins. 12-22.

In regards to claim 15 Beckwith et al., discloses a dock leveler wherein a generally horizontal working range includes positions where an end of the ramp assembly is about 8" above and about 8" below the horizontal. See col. 2, lns. 10-37.

In regards to claims 19-20 Beckwith et al. discloses a method for counterbalancing a mechanically-operating, vertically storing dock leveler (10) having a rotating ramp assembly (23, 44) attached to a base assembly (34, 22, 20, 12) at a pivot point (26) The method comprising the steps of:

Coupling a spring (36) to the dock leveler with a non-flexible attachment device (44).

What Beckwith et al. does not disclose is the use of a flexible attachment device and a camming surface configured to deflect the spring away from a "direct line of action".

However, Druzynski teaches a spring (18)-based counter-balance system and a method

of use comprising the steps of:

Coupling a spring (18) to a metal plate (12) with a flexible coupling member, such as a chain (24).

Providing a camming surface on element (26) to cooperate with the chain (24) to deflect the spring (18) away from a "direct line of action" in response to plate (12) rotation between a horizontal and vertical position. Wherein the camming surface is shaped to cause the spring to deflect toward a pivot point (20)as the ramp assembly rotates downwardly. See figs. 4, 5; cols. 3-4.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the dock leveler of Beckwith et al., with a flexible coupling member as taught by Druzynski, in order to reduce the speed at which the ramp assembly is raised to a vertical position. See col. 3, Ins. 12-22.

Allowable Subject Matter

4. Claims 16-18 are allowed.

Response to Amendment

5. Applicant's amendment to claim 18 has overcome the objection cited in the Last Office Action.

Applicant's replacement drawing sheets, replacing Figs. 5-7 is acknowledged and has overcome the Objection to the Specification, cited in the Last Office Action.

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Response to Arguments

6. Applicant's arguments filed 04/13/05 have been fully considered but they are not persuasive. Applicant argues against the 112 1st paragraph rejection of claims 1-15 by stating "the specification describes: As the ramp assembly 14 rotates downward, the direct line of action moves closer to the pivot shaft by virtue of the geometry of the fixed anchor points and the pivot point...as the ramp assembly 14 rotates, the upper and lower camming surfaces 52, 54 selectively engage the flexible chain 72, shifting the location of the effective anchor point 74...The term, 'effective anchor point' is the point of attachment of the end of the spring, which point's location can move as the ramp assembly 14 rotates".

However, the Examiner does not concur.

Claim 1 recites "a biasing member having a central longitudinal axis defining a line of action...wherein along the line of action, at least one effective anchor point is defined between the 1st and 2nd anchor points...further wherein as the at least one effective anchor point moves, the line of action of the biasing member moves to change counterbalance characteristics of the ramp".

It is clearly indefinite as to what the "effective anchor point" is. As claimed, it appears the "effective anchor point is an imaginary point on a line and not an actual structural limitation. Hence, determining what may or may not be an equivalent structure to "at least one effective anchor point".

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Still further, it is indefinite as to how movement of the "at least one effective anchor

point" causes a change in the counterbalance characteristics of the ramp assembly.

Would there be a different change in characteristics if more than one of the said "at

least one effective anchor points" is moving at the same time.

It appears as though the Specification is silent as to where more than one

"effective anchor point" would be located if more than one of the "at least one anchor

point" are located on the line of action simultaneously.

Hence, it appears as though one of skill in the art, would not be able to make or

use the claimed invention.

Therefore, the argument is not persuasive and the rejection is maintained.

Applicant then argues against the 35 U.S.C. 102(b) rejection of claims 1-4, 7, 8 by

stating Dieter '578 "does not teach or suggest a combination as recited by independent

claim 1 and its dependent claims...claim 1 recites a combination, wherein along the line

of action, at least one effective anchor point is defined...and further wherein as the at

least one effective anchor point moves, the line of action of the biasing member moves

to change counterbalance characteristics of the ramp assembly Dieter does not teach or

suggest such a combination".

However, the Examiner does not concur.

The limitations cited by Applicant do not define what characteristics are being changed

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or what the result of the change provides. Further, the claim as written only requires a dock leveler having 1st and 2nd anchor points and a biasing member there between, such that the dock leveler is configured to rotate between several positions, relative to a base assembly.

Clearly, the prior art of Dieter discloses the claimed structural features and the ability of the ramp assembly to rotate between several operational and a vertical stored position. See Col. 6 in its entirety.

Applicant then argues against the rejection of claims 1-20 as unpatentable over Beckworth et al. '175 in view of Druzynski '451 by suggesting a *prima facie* case of obviousness has not been made. Applicant supports the suggestion by repeating the argument that the wherein statements of Claim 1 are not taught by the prior art.

Applicant furthers the argument by suggesting "Beckworth and Druzynski does not introduce an effective anchor point different than the 1st or 2nd anchor points".

However, the Examiner does not concur.

The claims do not require movement of the devices to introduce an "effective anchor point" different than the first or second anchor points. The claims only require there to be "at least one effective anchor point", that moves along the line of action such that the line of action of the biasing member moves to change the counterbalance characteristics of the ramp assembly.

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To which Beckwith et al. discloses essentially all that is claimed, except for the use of a counterbalance system. However, Druzynski teaches a counter-balance system for biasing a metal plate (12) between a horizontal and a vertical position. Said system comprising a cam plate (26) having at least one cam surface that selectively engages the flexible member (24), and is shaped to deflect the line of action of the spring force, as the plate (12) rotates. Wherein said biasing members (18) are coupled to a base assembly (28) at said 2nd anchor point. Said cam plate (26) having an anchor hole at which the spring is fixedly coupled to the base assembly (28) via said flexible member/chain (24). Further wherein said at least one cam surface comprises upper cam surface and a lower cam surface, such that said anchor hole, flexible member (24) and said cam surfaces "cooperate" to deflect the line of action of the biasing springs (18), when plate (12) rotates about the pivot point (20).

Therefore, the argument is not persuasive and the rejection is maintained.

Applicant then argues "Neither Beckworth, et al. nor Druzynski...teach or suggest a method...providing a camming surface configured to cooperate with the flexible attachment device, to flex the flexible attachment device".

However, the claim, as recited does not limit the manner in which the camming surface can be "configured to cooperate"...to flex the flexible attachment device.

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The fact that Druzynski teaches that at least one cam surface comprises upper cam surface and a lower cam surface, such that said anchor hole, flexible member (24) and said cam surfaces "cooperate" to deflect the line of action of the biasing springs (18), when plate (12) rotates about the pivot point (20).

Therefore, the argument is not persuasive and the rejection is maintained.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Delgado et al. # 4,776,052 discloses a dockboard. Erlandsson et al. # 4,525,887 discloses a dockboard.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond Addie Patent Examiner Group 3600